Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services

STATEMENT OF BASIS

Zwolle Plywood and Sawmill
Weyerhaeuser NR Company
Zwolle, Sabine Parish, Louisiana
Agency Interest Number: 3443
Activity Number: PER20070005
Draft Permit 2700-00007-V4

I. APPLICANT:

Company:
Weyerhaeuser NR Company
P.O. Box 158, Zwolle, LA 71486

Facility:
Zwolle Plywood and Sawmill
2792 Obrie Street, Zwolle, Sabine Parish, Louisiana
Approximate UTM coordinates are 438.57 kilometers East and 3499.30 kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS:

Zwolle Plywood is an existing facility located in Sabine Parish near Zwolle. Currently the site operates under Permit No. 2700-00007-V3, dated May 21, 2007. Zwolle Plywood began operations prior to 1969 as Hunt Lumber Company. It was purchased in 1973 by Willamette Industries, Inc. Weyerhaeuser Company purchased the facility in 2002.

III. PROPOSED PERMIT / PROJECT INFORMATION:

Proposed Permit

A permit application and Emission Inventory Questionnaire were submitted by Weyerhaeuser NR Company on October 26, 2007, requesting a Part 70 operating permit modification. Additional information dated November 6, 2007, and January 2, 2008, was also received.

With this modification, Zwolle Plywood proposes to:

- Incorporate the provisions of 40 CFR 63 Subpart DDDD.
- Remove the requirement to maintain compliance with the Regenerative

Catalytic Oxidizer (RCO) Parametric Monitoring Plan that applies to the RTO (RCO) (EQT 19), instead complying with the provisions of 40 CFR 63 Subpart DDDD.

- Remove the 40 CFR 64 – Compliance Assurance Monitoring requirements that apply to the RTO (RCO) (EQT 19). Since the source is subject to 40 CFR 63 Subpart DDDD, the provisions of 40 CFR 64 no longer apply.
- Reincorporate Veneer Dryers #1 and #2 into the permit. The facility has previously received approval to demolish these veneer dryers and to construct two new veneer dryers. The facility has decided to cancel their construction plans and will instead rebuild the existing dryers, Veneer Dryer #1 (EQT 31) and Veneer Dryer #2 (EQT 32).

Project Description

Zwolle Plywood manufactures plywood from southern yellow pine logs. Logs are debarked and sawed to the desired length, heated in the steam chests, and then peeled into veneers. Green veneers are dried in two veneer dryers using steam and natural gas. Dried veneers are assembled, layer by layer, glued together using a phenol-formaldehyde resin based glue between plies to form plywood. Assembled plywood panels are hot pressed, trimmed to size, bundled, and stored prior to shipping.

The short pieces of leftover logs ("lilly pads") from block sawing are chipped and screened. Acceptable chips are stored in bins for sale to paper manufacturers. Unacceptable chips are stored in the fuel storage area to be used as fuel in the wood/bark fired boiler.

Zwolle Plywood processes its own cores, as well as cores generated at other Weyerhaeuser facilities. The facility has a capacity to manufacture 306 MM square feet, 3/8" basis, of plywood and 75 MM board feet (bf) of lumber annually.

Emissions sources include the regenerative catalytic/thermal oxidizer, waste wood fired boiler, electrostatic precipitator, two veneer dryers, debarker, and naturally occurring VOCs from the lumber kilns. Particulate emissions from wood sawing, planing, sanding, and trimming operations are controlled by cyclone separators having design efficiencies of greater than 90 percent.

Section 6 of the Permit Application, dated May 1, 2003, lists the permitted emission rate before and after the project (in tons per year) for each emission point in the permit. These changes are summarized in the Permitted Air Emissions Section.

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Permitted Air Emissions

Estimated changes in permitted emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM_{10}	94.26	94.26	-
SO_2	11.22	11.22	-
NO_X	114.63	114.63	-
CO	273.09	273.09	-
VOC	259.87	259.87	-

Prevention of Significant Deterioration Applicability

The pollutants are not being increased by significant amounts by the project. Therefore, the proposed facility is not subject to the requirements of the PSD program.

This application was reviewed for compliance with 40 CFR 70, the Louisiana Air Quality Regulations, New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP).

MACT Requirements

Zwolle Plywood and Sawmill is a major source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51. Chlorine (and compounds) (Class III) and Methanol (Class III) are emitted in amounts in excess of the major source threshold. Acetaldehyde (Class II), Barium (and compounds) (Class II), Benzene (Class I), Chlorine (Class III), Copper (and compounds) (Class II), Formaldehyde (Class I), Manganese (and compounds) (Class II), Methanol (Class III), Phenol (Class II), and Zinc (and compounds) (Class III) are emitted in amounts that exceed their respective Minimum Emission Rate (MER). MACT must be addressed for emissions of Class I or Class II Toxic Air Pollutants in excess of their respective MER that occur at major sources of Toxic Air Pollutants. MACT has been determined to be compliance with 40 CFR 63 Subpart DDDD – Plywood and Composite Wood Products.

The facility complies with the ambient air standards (AAS).

Air Modeling Analysis

Emissions associated with the proposed modification were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

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General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to Section VIII of the draft Part 70 permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to Section IX of the draft Part 70 permit.

Regulatory Analysis

The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the draft permit, or where provided, Tables 2, 3 and 4 of the draft permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the draft permit, or where provided, Tables 2, 3 and 4 of the draft permit.

IV. Permit Shields

There is no permit shield.

V. Periodic Monitoring

Compliance Assurance Monitoring

Federal regulation 40 CFR 64-Compliance Assurance Monitoring is applicable to this facility. Applicability for each pollutant requires that the unit be subject to an emission limitation or standard and must use an active control device to achieve compliance. The following emission sources with pollution control equipment have a pre-control emission rate of a pollutant over 100 tons per year and were determined to require a CAM Plan: 003-Wood-Fired Boiler with ESP, 006-Planer Shavings Cyclone with PFF, and 007-Plytrim and Hogged Wood Cyclone with PFF.

The electrostatic precipitator (ESP) serves to collect and reduce particulate emissions associated with the combustion of wood waste material produced during the manufacture of lumber and plywood products at the facility. The monitoring of the ESP voltage ensures that particulate emissions are being controlled. Instantaneous readings of the voltmeter are recorded once daily. Flue gas oxygen concentration is continuously monitored to ensure that the concentration is greater than or equal to 2 percent.

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The Planer Shaving Cyclone with PFF and the Plytrim and Hogged Wood Cyclone with PFF serve to collect and reduce particulate emissions associated with the manufacture of lumber and plywood products. Opacity is used to determine if particulate emissions are exceeded. Daily visual examinations of emissions from the baghouses are conducted to determine the efficiency. Should the opacity check result in an observation of excess emissions, the filter elements will be inspected and if necessary, replaced. In addition, semiannual inspections of the filter elements will be conducted to determine if replacement is necessary. The Dwyer Magnahelic Differential Pressure Gauge measures the differential pressure between the material side and the clean side of the filter element. A differential pressure of three or more inches indicates that the bag should be replaced.

VI. Applicability and Exemptions of Selected Subject Items

ID No:	Requirement	Notes
EQTs 14, 15, 19, 31, 32, and FUG 5	Emission Standards for Sulfur Dioxide [LAC 33:III.Chapter 15]	DOES NOT APPLY. Units emit less than 5 tons of SO_2 per year. [LAC 33:III.1502.A.3]
EQT 16 EQT 19	Waste Gas Disposal [LAC 33:III.2115]	EXEMPT. VOC concentration < 3000 ppmv. [LAC 33:III.2115.H.1.d]
FUG 2	Storage of Volatile Organic Compounds [LAC 33:III.2103]	DOES NOT APPLY. Vapor pressure < 1.5 psia. [LAC 33:III.2103.A]

VII. Streamlined Requirements

Unit or Plant Site	Programs Being Streamlined	Stream Applicability	Overall Most Stringent Program
Zwolle Plywood and Sawmill	None	-	-

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VIII. Glossary

Best Available Control Technologies (BACT) - An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this part which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

Carbon Monoxide (CO) – A colorless, odorless gas which is an oxide of carbon.

Grandfathered Status- Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

Hydrogen Sulfide - A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the action of acids on metallic sulfides, and is an important chemical reagent.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

New Source Review (NSR) - A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Nonattainment New Source Review (NNSR) - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to

ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH_4), Ethane (C_2H_6), Carbon Disulfide (CS_2)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: $\geq$ 10 tons per year of any toxic air pollutant; $\geq$ 25 tons of total toxic air pollutants; and $\geq$ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM_{10}- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO_2) – An oxide of sulphur.

Title V permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.